

REMARKS

The present response cancels all previously pending claims, and presents new claims 27 – 52 for further examination.

In view of the cancellation of the previously pending claims, all prior art rejections of such claims are moot. In so far as the earlier cited and applied references are relevant to the new claims, Applicant submits that the present invention as now defined by the new claims can be distinguished from the references, for at least the reasons stated below.

Taniguchi does not disclose a backlight device that comprises “a two dimensional array of point light sources; and a light guide plate comprising a first surface facing the array of point light sources and a second surface emitting light passing through the light guide plate, wherein the first surface comprises a two dimensional array of convex structures, with each convex structure aligned with a point light source in the array of point light sources”, as recited in new independent claim 27. Similarly Taniguchi does not disclose “a two dimensional array of point light sources; and a planar light guide plate comprising a first surface facing the array of point light sources and a second surface emitting light passing through the light guide plate, wherein the first surface comprises a two dimensional array of protrusions, with each protrusion aligning with a point light source in the array of point light sources”, as recited in new independent claim 51.

Taniguchi discloses an edge-lit backlight structure, in which the light guide plate is structured for use with a linear light source positioned at an edge of the light guide plate. Taniguchi does not disclose a light guide plate having a two-dimensional array of point light sources. The Taniguchi light guide plate has a textured surface that facilitates reflection of the light that is transmitted from the linear light source through the light guide plate. The textured

light guide plate does not receive external light or facilitate transmission of external light through the textured surface of the light guide plate.

Cho shares many similar deficiencies as Taniguchi. Cho does not disclose a backlight device that comprises “a two dimensional array of point light sources; and a light guide plate comprising a first surface facing the array of point light sources and a second surface emitting light passing through the light guide plate, wherein the first surface comprises a two dimensional array of convex structures, with each convex structure aligned with a point light source in the array of point light sources”, as recited in new independent claim 27.

Similarly Cho does not disclose “a two dimensional array of point light sources; and a planar light guide plate comprising a first surface facing the array of point light sources and a second surface emitting light passing through the light guide plate, wherein the first surface comprises a two dimensional array of protrusions, with each protrusion aligning with a point light source in the array of point light sources”, as recited in new independent claim 51.

Cho instead discloses the use of fluorescent lamps (10) in conjunction with a reflection plate (11), much like the prior art backlight module structure disclosed in the Background section and Figs. 1 and 2 of the specification of the present invention. Each fluorescent lamp (10) is a linear light source received in a lamp groove in the light guide panel (12). The row of fluorescent lamp (10) is at most a linear array of linear light sources, but not a two dimensional array of point light sources. The linear array of linear light sources are not distributed in a two dimensional matrix or uniformly across plane of the light guide plate, as is the case in the embodiments shown in the Fig. 4 and Fig. 5a in the specification of the present application. The cross-sectional views in Cho and the translated detailed description do not refer to a two dimensional array of point light sources. Applicant respectfully requests the Examiner to point

to specific section in Cho that would form a prima facie basis for anticipation of the claimed invention.

Further, Cho does not render the claimed invention obvious. As noted above, Cho is directed to the use of fluorescent lamp tubes for its light sources. The light guide panel is specifically designed by Cho to accommodate the lamp tubes. Cho lacks any suggestion that the lamp tubes can and should be modified with point light sources, such as LEDs. For example, there is no indication anywhere in Cho that the light guide panel (12) with grooves would be suitable for use with a two dimensional array of point light source. The light guide panel (12) provides reflective surfaces at the bottom of the light guide panel (12), to direct light from the linear fluorescent lamps (10) in the grooves towards to the top light emitting surface. It appears that this specific light guide plate structure would only be suitable for a linear array of linear lamps, not a two dimension array of point light sources required by the claimed invention.

The new dependent claims add further limitations that further distinguish from Taniguchi and Cho. For example, the two dimensional array of convex structures comprises convex structures distributed uniformly in both dimensions on the first surface of the light guide plate (claim 28); the two dimensional array of convex structures comprises convex structures distributed in a two dimensional matrix across plane of the first surface of the light guide plate (claim 29); the first surface further comprises a planar surface from which the convex structures extend (claim 30); each point light source is not entirely received in the corresponding recess of the convex structure (claim 32); at least a portion of each point light sources remains outside the corresponding recess of the convex structure (claim 33); the two dimensional array of point light source comprises a two dimensional array of LEDs (claim 37); the point light sources are

juxtaposed to the distal end portion of the convex structure (claim 43); and other limitations recited in the respective dependent claims.

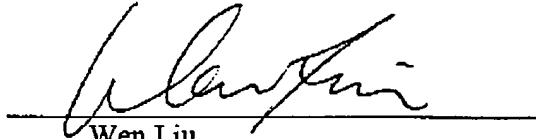
In view of the foregoing, Applicant respectfully submits that independent claims 27 and 51, and all the claims dependent therefrom, are patentable over Taniguchi and Cho.

CONCLUSION

In view of all the foregoing, Applicants respectfully submit that the claims pending in this application are patentable over the references of record and are in condition for allowance. Such action at an early date is earnestly solicited. **The Examiner is invited to call the undersigned representative to discuss any outstanding issues that may not have been adequately addressed in this response.**

Respectfully submitted,

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